

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/07/2009 has been entered.

2. Newly submitted claims 1 and 6 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:  
the applicant added the limitation "by averaging of the high-resolution data using a matrix comprised of a plurality of boxes in which each box, having a size of the low-resolution data, is **emphasis** shifted by half a pixel to one pixel of the high-resolution data, and has weighted coefficients of the averaging corresponding to an area ratio overlapping each pixel of the high-resolution data" this is a limitation is a feature in the second embodiment and therefore changes the claimed invention from previously presented claimed invention which was the first embodiment. NB: Applicant cannot claim different embodiments in the prosecution of a case.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 1 and 6 withdrawn from consideration

as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 2, 4-5,9,11-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Kawano (6480302).

**Claim 2**, Kawano discloses a method wherein said resolution conversion step includes averaging the high-resolution data using a matrix of a predetermined size and subjecting the actual resolution of the output apparatus to a resolution conversion. **(Col. 6 lines 53-56, Fig. 5 a-x are matrixes are used in the conversion of the bitmaps which has a higher resolution than the printing apparatus).**

**Claim 4**, Kawano discloses a method wherein a prescribed pattern is formed that will take on a different image formation state by the prescribed low-resolution conversion method despite the fact that an original image pattern is the same the density of the prescribed pattern is measured, **(Fig. 5a-x shows the prescribed**

**pattern which is used during the resolution conversion)** and the laser exposure is determined in such a manner that the density of the prescribed pattern will be the same before and after image formation. **(Col. 6 lines 53-64 thus the given pixels values such as “7Fh” helps to determine the amount of laser to be exposed to that pixel or as clearly stated the “black pixel will be converted as such).**

**Claim 5**, Kawano discloses a method wherein a prescribed pattern is formed that is repeated at fixed intervals, the density of the prescribed pattern is measured and the laser exposure based upon the measured density in such a manner that a difference in average density will not develop between the prescribed patterns. **(Kawano: Col. 6 lines 35-45- thus inherently the resolution conversion has to convert the resolution of the image to the printing resolution of the printer so that it can be printed or outputted)**

**Claim 9**, Kawano discloses wherein said resolution conversion unit averages the high-resolution data using a matrix of a predetermined size and subjects the actual resolution of the output apparatus to a resolution conversion. **(Col. 6 lines 53-56, Fig. 5 a-x are matrixes are used in the conversion of the bitmaps which has a higher resolution than the printing apparatus).**

**Claim 11**, Kawano discloses wherein a prescribed pattern is formed that will take on a different image formation state by the prescribed low- resolution conversion

method despite the fact that an original image pattern is the same, the density of the prescribed pattern formed is measured, **(Fig. 5a-x shows the prescribed pattern which is used during the resolution conversion)** and the laser exposure is determined in such a manner that the density of the prescribed pattern will be the same before and after image formation. **(Col. 6 lines 53-64 thus the given pixels values such as “7Fh” helps to determine the amount of laser to be exposed to that pixel or as clearly stated the “black pixel will be converted as such).**

**Claim 12**, Kawano discloses an apparatus wherein a prescribed pattern is formed that is repeated at fixed intervals, the density of the prescribed pattern is measured, and the laser exposure is determined based on the measured density in such a manner that a difference in average density will not develop between the prescribed patterns. **(Col. 6 lines 35-45- thus inherently the resolution conversion has to convert the resolution of the image to the printing resolution of the printer so that it can be printed or outputted).**

**Claim 13**, Kawano discloses wherein first, second, third and fourth halftone dot patterns are included in the plurality of halftone dot patterns, and wherein the laser exposure **(Laser Element 132 shown in Fig. 12)** amount corresponding to the target halftone value is determined based on a first laser exposure amount **(Col. 14 lines 19-26 – thus the amount of laser light emitted onto the medium depends on the current value therefore greater the current value, the more amount of laser**

**emitted or exposed to the medium)** corresponding to the target halftone value obtained from the first and second halftone dot patterns, **(Col. 13 lines 45-49- thus the target halftone value is the same as value or number of the pixel of interest-hence the pixel that laser must be applied)** and based on a second laser exposure amount corresponding to the target halftone value obtained from the third and fourth halftone dot patterns in a case where the first laser exposure amount differs from the second laser exposure amount. **(Col. 6 lines 53-56- thus some pixels will be converted with the value "3Fh" or "7Fh" depending on the pixel value and therefore the resolution will differ).**

**Claim 14**, Kawano discloses wherein first, second, third and fourth halftone dot patterns are included in the plurality of halftone dot patterns, and wherein the laser exposure amount **(Col. 14 lines 19-26 – thus the amount of laser light emitted onto the medium depends on the current value therefore greater the current value, the more amount of laser emitted or exposed to the medium)** corresponding to the target halftone value **(Col. 13 lines 45-49- thus the target halftone value is the same as value or number of the pixel of interest-hence the pixel that laser must be applied)** is determined based on a first laser exposure amount corresponding to the target halftone value obtained from the first and second halftone dot patterns, **(Col. 6 lines 53-64 thus the given pixels values such as "7Fh" helps to determine the amount of laser to be exposed to that pixel or as clearly stated the "black pixel will be converted as such)** and based on a second laser exposure amount

corresponding to the target halftone value obtained from the third and fourth halftone dot patterns in a case where the first laser exposure amount differs from the second laser exposure amount. **(Col. 6 lines 53-56- thus some pixels will be converted with the value "3Fh" or "7Fh" depending on the pixel value and therefore the resolution will differ).**

#### ***Response to Arguments***

4. Applicant's arguments filed 10/07/2009 have been fully considered but they are not persuasive.

Applicant argued that the term halftone value corresponds to a value of image data having 256 levels of 0 to 255 and therefore asserts that the 112 first paragraph rejection should be withdrawn.

**In reply**, Examiner disagrees and maintained the 112 first rejections because the term halftone value is totally different from a target halftone value and even page 14 which was referred to by the applicant does not mention halftone value. Therefore because the term target halftone value used in the claims is not described within the specification for one ordinary skilled in the art to understand, the 112 first rejection will not be withdrawn.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AKWASI M. SARPONG whose telephone number is

(571)270-3438. The examiner can normally be reached on Monday-Friday 8:00am-5:00pm est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Poon can be reached on 571-272-7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/King Y. Poon/  
Supervisory Patent Examiner, Art Unit 2625

AMS  
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